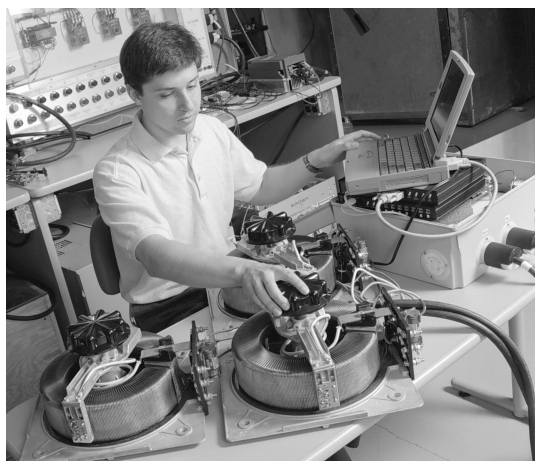


## On-Site Power Quality Diagnostic Services

An offering of EPRICSG, Inc.



When most electrical devices were simple, motor-based mechanisms, customers could tolerate occasional voltage swings. Times have changed. Today's commercial businesses are betting their livelihood on computers, digital controls, and other equipment whose sensitive electronics require the highest-quality power. And, industrial plants must have an ultrareliable source of electricity to support their increasingly sophisticated manufacturing processes.

Many industrial and commercial customers today are struggling with the system compatibility problems brought about by sensitive new electronic devices. They are also addressing problems caused by overloaded electrical wiring, faulty grounding, aging wiring systems, misapplied data cables, and inadequate shielding of appliances. Furthermore, they face power quality problems in the electrical supply, including voltage sags and surges.

You can help your industrial and commercial customers to evaluate and resolve all of these types of problems by taking advantage of EPRI *On-Site Power Quality Diagnostic Services*. This opportunity offers site-specific services, while leveraging resources from an EPRI matching fund.

Brings the Innovative Diagnostic Tools and Singular Expertise of EPRI PEAC Corp. to Your Customers

**SUMMARY** Equipped with special field tools and experience gained through years of power quality testing and research, EPRI PEAC Corporation can provide on-site evaluations of your industrial and commercial customer facilities. This opportunity offers two levels of services: the Power Quality Walk-Through and the Power Quality Audit.

In the Power Quality Walk-Through, EPRI PEAC Corp. engineers visit your customer's facility to determine the cause of equipment malfunctions and process interruptions. Walk-throughs typically take from one to three days, depending on the facility size and extent of problems. A final report details findings of the investigation and recommends solutions.

The Power Quality Audit is a more comprehensive investigation, typically lasting from three days to more than one week. It includes a complete probe of the customer facility as well as reviews of wiring diagrams and the electrical distribution system. It also applies formal troubleshooting procedures, using on-site power quality monitors and the EPRI Process Ride-Through Evaluation System, or Porto-Sag.

The Porto-Sag is a unique, portable diagnostic tool designed and built by EPRI PEAC Corp. that allows investigators to identify weak links in a process by inducing precisely controlled voltage sags and monitoring the response of process equipment. It eliminates the time-consuming tactic of monitoring customer equipment and waiting for a disturbance to occur. It can evaluate components such as dc power supplies, relays, contactors, adjustable speed drives, and programmable logic controllers.


After using the Porto-Sag to induce voltage sags of various magnitudes and durations, EPRI PEAC Corp. engineers plot a voltage-tolerance curve for the critical equipment in your customer's operations along with a master curve representing the sag tolerance of the entire process. These curves are then used to determine solutions that protect only vulnerable equipment from disturbances—rather than applying expensive power conditioning equipment to components that do not need protection. A final report includes audit findings and recommended solutions.

**DELIVERABLES** You may choose a Power Quality Walk-Through, a Power Quality Audit, or both services for your customer. Each includes a customized report of findings and recommendations. The length of each service will vary from one day to approximately one week, depending on facility size and the scope of your customer's needs.

**RETURN ON INVESTMENT** In the era of electricity deregulation, you can retain more customers by providing them with comprehensive investigations to resolve their power quality and system compatibility problems. You establish expertise and enhance your image by demonstrating state-of-the-art power quality services and diagnostic tools. You also build loyalty and save money for your customers by selectively conditioning the power to sensitive equipment instead of modifying an entire process.

**CONTACT INFORMATION** For more information, contact the EPRI Customer Assistance Center at 800-313-3774 or [askepri@epri.com](mailto:askepri@epri.com).

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